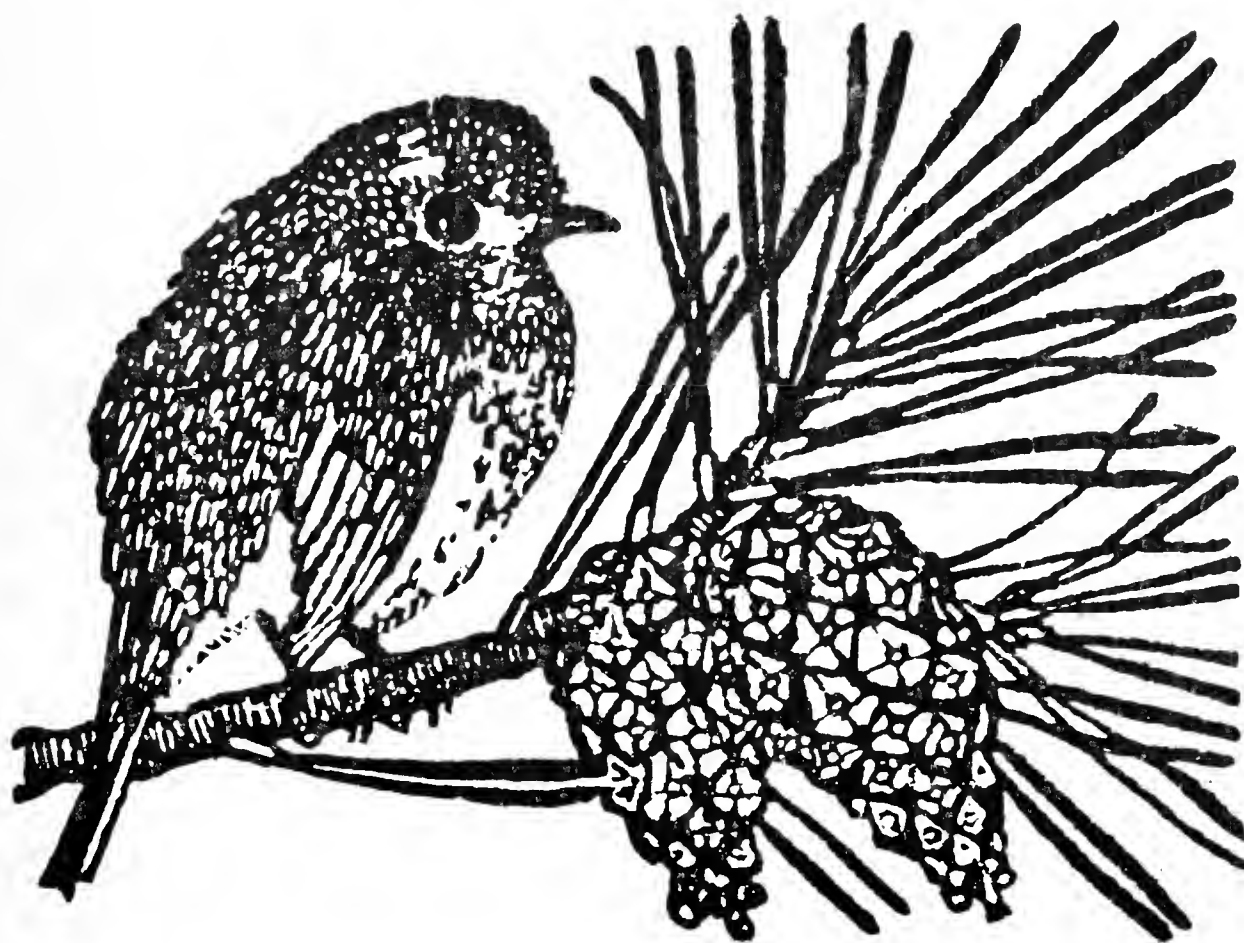


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Horticulture Northwest

Volume 13 Number 4
Winter 1986

Sallie D. Allen, Editor

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Cover Illustration

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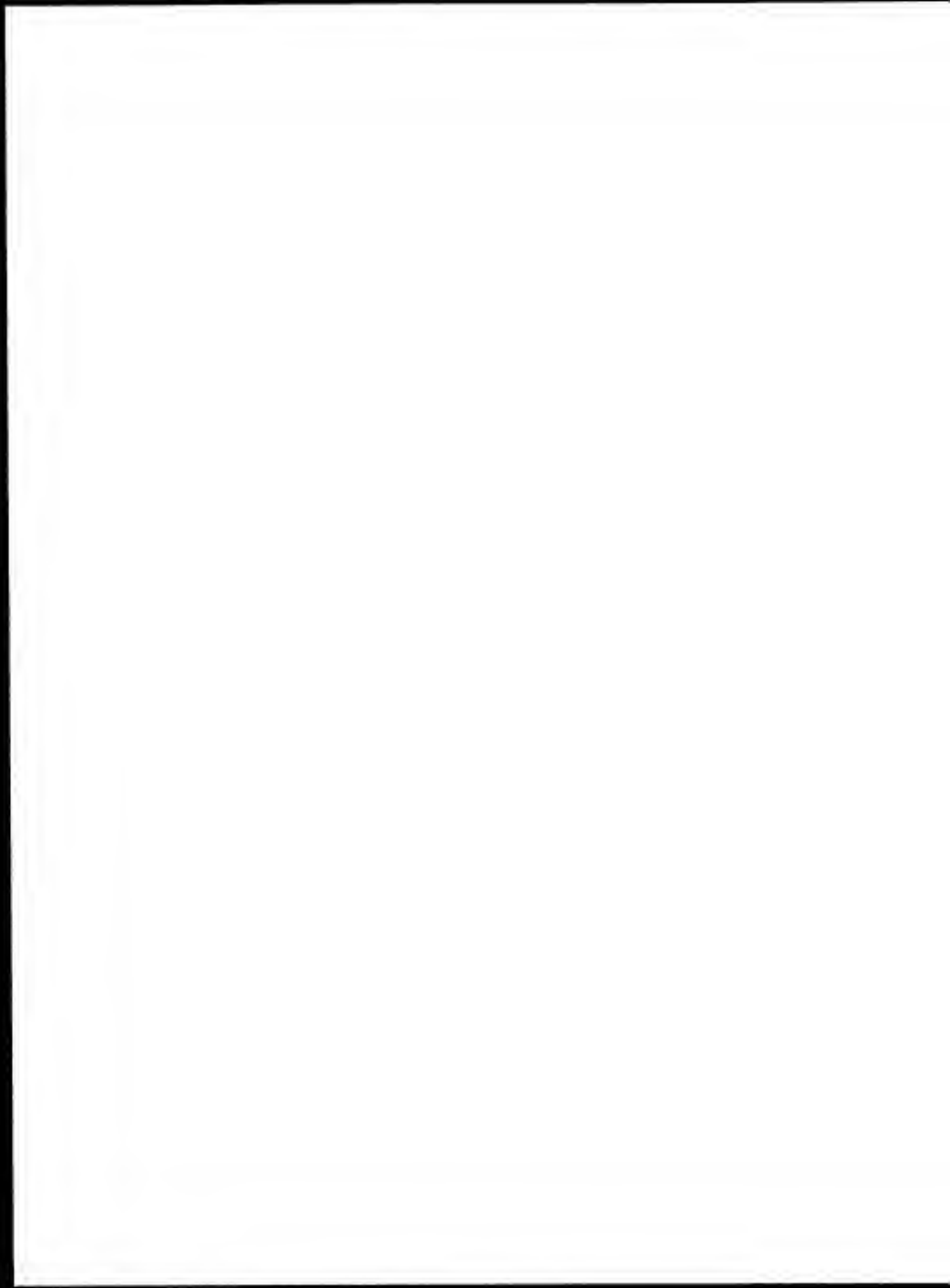
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EDITORIAL

Under the able leadership of our creative new President, Mayde Anderson, we, your NOHS Board of Directors, look forward to 1987 with enthusiasm and excitement and NEW ideas, NEW directions, and NEW vistas. Mayde, like each succeeding President since our inception in 1966, "was volunteered and accepted the job because there was a need and it was now her turn to accept and take responsibility...." NOHS is fortunate indeed to have Mayde presiding over the affairs of the society, and we all look forward to working closely with her and supporting her loyally.

The Board, at the November meeting, passed the motion to send each new member in the welcoming packet of information, the Fall 1984 Special Celebration issue of Horticulture Northwest, relating the history of our organization and the Center for Urban Horticulture. One of our most loyal members from the beginning observed, "Each member should reread this history from cover to cover, annually, to remind them what this organization is all about, and feel pride in their membership in this gutsy, little horticultural society."

Within the unsung hero department, Membership Chairman Vernetta Cunningham must be recognized with appreciation and affection as she is the pulse of the NOHS, keeping us running smoothly and efficiently. At the same time, she manages to volunteer countless hours for important in-organizational jobs, large and small. Volunteerism has always been the life's blood of the NOHS for 20 years (sometimes we think we invented it!).

Sue Olson, Fern Festival Chairman, is already at work planning an innovative, bigger and better event, garden tours, and an extended fern sale with flowering springtime companion plants. Something for everyone. In addition, one of the world's most authoritative FERN specialists, author, lecturer, and delightful friend, will be coming to the United States for the very first time in order to lecture in Seattle for NOHS. We will tell you no more about him; watch for the upcoming publicity.

Everyone loves a plant sale and our NOHS Fall sale "Catering to the Discriminating Gardener" is no exception. Co-chairmen Mike Hayes and Phil Simpson are already discussing their fresh new ideas, not only involving your old favorite departments, but exciting new plants and specialties, with young new participants. Such an outstanding year of speakers and programs for our lecture series has been arranged by Program Chairman Shirley Gorman, that you will not want to miss a single one. Garden tours, several repeated by popular demand, were described in detail by tour leader, Elizabeth Fiske. Our unique Seed Exchange, a year-round project for co-chairmen Sylvia Duryee and Marge Baird, will be bigger and better this year, with the seed list reaching you by the middle of January. In the same manner, the budget and financial matters of the NOHS are managed in a professional manner by Treasurer Marilyn Taylor and her assistant, Jeanette Michel.

The Journal, too, is taking new directions, beginning by new additions to the Editorial Board, Dr. Clement Hamilton and Van Bobbitt from CUH. Faculty and staff there are writing some of the finest articles ever published in Horticulture Northwest. When asked, others at CUH advise, proof, and are writing for upcoming issues. The next issue of the Journal is in final form, themes of future issues planned, and a backlog of super material in the files. OH joy!

Special Publications is a new direction dreamed of by your Editor for many years, offering in booklet form compilations of the best articles published in the Journal over the years. These can be sold as a fund-raising method to help defray the high cost of printing and mailing our quarterly. The Summer 1986 Special Fern Issue is ready to go with only minor modifications. Other possible titles are The Carl S. English Gardens at the Government Locks, with the addition of little known articles by two of the most gifted writers of this century, Edith and Carl English, who played a leading role in the history of botany and horticulture in the Pacific Northwest. One of our foremost Northwest publishers is interested in our idea of a book entitled The Best of George Schenk. George, an NOHS member, is the internationally recognized author of Rock Gardens and the Shade Garden, and unquestionably one of the finest garden writers of our time. He has assigned all royalties for this proposed book to NOHS. We have countless articles in the files, some published in the Journal and some not, on the popular subject of Herbs. An extensive book could come of this. Gifted artists are needed to further illustrate our publications.

So, what are we waiting for? A Special Publications Chairman is essential to work with your Editor to make these dreams a reality. Interested? Call me. There are many possible outlets for these NOHS Special Publications, one of which could be a new Horticulture Northwest feature, NOHS Bookstore. In addition, the finest horticultural and botanical publications from all over the world could be offered at a substantial discount to our members and considerable profit to NOHS. The preliminary research is on file and we are awaiting an NOHS Bookstore Chairman to work with your Editor.

In order to maintain a high quality of excellence, to continue to offer a unique Journal to the amateur and professional plant loving community, locally, nationally, and internationally, it has become nearly a full-time job for your Editor. Realizing this your NOHS Board has voted to partially compensate your Editor, after having held the position since its inception 13 years ago. The vote of confidence was heartwarming. However, to do this (and this has caused me to do a great deal of soul searching), something has to be sacrificed. Your hard-working, thoughtful Board believes in working on a strict budget and within its income. We have brainstormed Ways and Means to pare the costs to the bone. As with every other horticultural society with services and a publication, the cost of printing and postage are astronomical. The total cost (two-year period) 1985-1986 for your Journal alone... \$12,385. Figures do not lie. We are heavily committed to CUH, \$15,000 a year for five years, and rightly so; we are its founders, it is our baby, our creativity, and we must continue support to the maximum of our ability.

Sacrifice? In order to compensate your Editor, the Journal must be cut to two issues a year. Soul searching? For 13 years I have held the line, staunchly maintaining that four issues a year is not only needed for continuity, but it is essential for the members as it is the only thing given free with membership dues. One fifth of our members live outside the State of Washington, retaining membership solely on the strength of the Journal they receive. Our other services are at a charge to our members, and predominantly for those within reasonable driving distances. The dreams of an Editor are to add services, add pages of good information, not to take away. Does integrity have to be sacrificed for the almighty dollar?

NO, of course not! The answer is here: Publication fund... each member sending in \$5.00 or more would do it... Special Publications... with volunteers contributing time and expertise... NOHS Bookstore Chairman... volunteer... Fund Raising Projects, large and small... Plant sales our specialty... and many new participating members, young and older. Let's co-sponsor activities with CUH and bring in more dollars for both. We learned a long time ago that many small dollars add up to big dollars.

Members, the Northwest Horticultural Society is your society. What is your pleasure? Let us hear from you. We're in the book.

Sallie D. Allen

* * *



American Horticultural Society

Box 0105, Mount Vernon, Virginia 22121
703-768-5700

NOHS RECEIVES AWARD

MERITORIOUS SERVICE CITATION

The Meritorious Service Citation is being given annually to a member or friend of the Society to recognize publicly outstanding and exemplary service on the part of an individual in support of the Society's programs, services, or activities.

"Meritorious Service" well describes the Northwest Horticultural Society. Their distinguished career began in 1966 with fifteen ladies, dedicated, keen horticulturists who founded Friends of the University of Washington Arboretum, Inc. The name change in 1973 to N.O.H.S. reflected a desire to be more than a "support" group--more of an independent horticultural society, not only to support the University of Washington Arboreta, but also provide lectures, exhibits, plant sales to educate, seed exchanges, garden tours, study groups, and to publish a quarterly Journal: Horticulture Northwest.

All of their efforts were able to substantiate the need for strong local academic presence in urban horticulture, which was not being done anywhere! The rest is history...(at a time of budget reductions!) the University of Washington found a possible site, the N.O.H.S. raised \$35,000 to fund a site study. The recommendations were adopted and the Center for Urban Horticulture was born in 1980. The ground breaking in '83--open in '84--the \$3-1/2 million architectural award winning facility was financed entirely by private funds solicited extensively by the N.O.H.S. Now, with faculty, staff, and graduate students numbering forty, it is currently a model program around the country, for the benefit of us all.

None will ever forget the assemblage of eraceous materials prepared by these ladies for the XI International Botanical Congress. Delegates from eighty nations attested--the largest representation grown in a single area! A list was published and the Society helped sponsor expeditions to Asia and South America.

Almost every worthwhile project in greater Seattle has benefitted from the advice, work, and funds of the Society and its members. "Gutsy and active" are the two most frequent words used to describe the N.O.H.S.

The A.H.S. is pleased to add our recognition to the list of distinguished awards and medals so deserved by the Northwest Horticultural Society.

Their new President, Mrs. Gordon Anderson, will receive the award. Will all the other members present, please stand and be recognized?

* * *

NATIONAL COUNCIL FOR THERAPY
AND
REHABILITATION THROUGH HORTICULTURE

79

COUNCIL HONORS HORTICULTURAL THERAPY AWARD RECIPIENTS

Dennis Dean Thompson*
Seattle, Washington

October 20, 1986 -- The world famous Fairchild Tropical Garden in Miami, Florida was the setting for the annual awards presentation by the National Council for Therapy and Rehabilitation through Horticulture honoring persons and organizations whose contributions to the horticultural therapy movement are worthy of national recognition. Horticultural Therapy utilizes plants and horticulture activities to improve social, educational, psychological, and physical adjustment. It has been successfully utilized in training, rehabilitation, and therapy programs for persons who are disabled and/or disadvantaged. The presentations were made during the membership meeting of the National Council's 14th Annual Conference. Persons receiving awards exemplified the conference theme of putting "Ideas into Action".

Dennis Dean Thompson, HTM, (NOHS member), Head of the Horticultural Therapy Department at Edmonds Community College, Lynnwood, Washington, was the recipient of the Rhea McCandliss Professional Service Award, given in recognition of significant contribution to the profession by a registered member of the National Council. A respected author, national and international lecturer, designer/instructor in Landscape Design and professional photographer/assembler of audio visuals, Mr. Thompson's entire professional career has centered around horticulture and its effect upon the human race. In 1984, Mr. Thompson was selected as a Fulbright educator/participant studying the effects of horticulture/agriculture on native populations in Peru. Further, he was a member of the team which launched the nationally and internationally recognized Horticultural Therapy Program at Edmonds Community College. More recently, Mr. Thompson has designed a model playground for children and a child's garden for Snohomish County Head Start.

* Dennis Thompson: Art Editor of Horticulture Northwest, Editorial staff and advisor. Editor.

* * *

DAVID LEACH AWARDED VAIL MEDAL

David G. Leach (NOHS member) of North Madison, Ohio, recently received The Garden Center of Greater Cleveland's prestigious Dahlia White Vail Memorial Gold Medal, one of the eleven top horticultural awards given nationwide.

Cited in the presentation were Leach's numerous accomplishments in rhododendron hybridizing, particularly his efforts to develop varieties with outstanding flower quality, hardiness, and the ability to perform under adverse conditions. Special mention was made of Rhododendron 'Golden Gala', Leach's hardy yellow, named to commemorate Holden Arboretum's 50th anniversary.

Among Leach's numerous tributes for his work with rhododendrons are the American Rhododendron Society's Gold Medal and the Jackson Dawson Medal of the Massachusetts Horticultural Society. David Leach is the only American to have received the Loder Cup of the Royal Horticultural Society of England.

Leach is past president of the American Horticultural Society, former director of the American Rhododendron Society and former national director of the International Plant Propagators Society.

THE DESIGN OF THE MCVAY COURTYARD AT THE CENTER FOR URBAN HORTICULTURE

Iain Robertson, Landscape Architect

The way we relate to landscapes is largely determined by the uses we put them to, and whether these uses encourage us to look at the landscape functionally, aesthetically, or symbolically. Thus, we may regard landscapes in which the physical requirements of the uses are dominant as "functional landscapes", examples of which are ball fields and parking lots. Other uses may require landscape designs whose primary purpose is to create particular emotional responses, and these we may call "aesthetic landscapes", of which the most obvious example is the garden. Finally, there are landscape designs whose primary purpose is to evoke a mental response. Such "symbolic landscapes" include war memorials and Zen gardens. Very rarely is a landscape architect asked to design a landscape in which functional, aesthetic, and symbolic considerations are all important and must be consciously considered and expressed in the completed work. However, the McVay Courtyard, a 60 x 70-foot space located at the heart of the Center for Urban Horticulture, is such a case. Within this small space, the designers were asked to solve complex functional problems of circulation, meeting and sitting space; create an aesthetically pleasing place; and symbolize the essence of the Center's mission -- no small task.

Jones & Jones, the firm selected to design the Courtyard, had been intimately connected with the planning and development of the Center for many years, having prepared the Master Plan for Union Bay Teaching and Research Arboretum in 1976, and having designed all of the Center's buildings. The firm, thus, had the necessary understanding of the needs and purposes of the Center to enable them to express these functionally, aesthetically, and symbolically in the Courtyard design. This article describes some of the ideas that were incorporated into the completed work. The author hopes that the explanations offered here will increase the reader's appreciation of the design, and encourage them to examine other landscapes more closely to seek interest and meaning in them.

To set the stage for the discussion of the project, it is necessary to briefly describe the program requirements that were developed for the space. Functionally, it was required to accommodate the following uses: an outside gathering space for large numbers of people using the Conference Hall; convenient circulation through the Courtyard, recognizing a dominant desire line which runs diagonally across it; sitting areas that could comfortably accommodate a single individual, several small groups or a larger crowd; and relatively low maintenance requirements. The Aesthetic requirements were no less complex. Because of its location, it was necessary that it look attractive from the windows that surround it on all sides, and because of its function as a "front door" where visitors receive their first impression of the Center, it had to be appealing and inviting. In addition, it was felt that a university department dedicated to the study of urban horticulture should present an innovative appearance, rather than merely conform to familiar aesthetic patterns. In brief, the Courtyard had to look attractive, look interesting, and look different.

The third and least tangible set of requirements were the symbolic ones. The Courtyard design had to represent the mission of the Center, which is to scientifically study and disseminate information on horticultural practices and materials that could improve the quality of the urban environment and urban life. At an early stage in the design process, it was decided that the mission should be represented symbolically rather than literally, as the latter approach could not be made to satisfy the functional and aesthetic requirements also.

These were the complex requirements which the team had to resolve in the design of the McVay Courtyard. The design process continued for more than one year, during which time ten alternatives were developed and assessed. The final design combines the best features of the two preferred alternatives and owes much of its inspiration to the assistance provided by experts within the Center and from the horticultural community. The design represents a careful balance of the functional, aesthetic, and symbolic considerations described above.

Let us begin our discussion of the Courtyard by considering the concrete paving (and not the rocks, even though these arrived on site a good year ahead of anything else and occasioned considerable comment during the "rock and mud" period). The work of the Center draws on knowledge of the plant world derived from two sources. One of these is information on plants which have been introduced into cultivation through the efforts of plant hunters over many centuries and in all corners of the globe. (For example, northwest explorers whose names are commemorated in plant names include Vancouver, Menzies, Lewis, Clark, and Douglas.) The other source of knowledge comes from the naturalists, botanists, and horticulturists who have scientifically studied plants, thereby increasing our understanding and appreciation of them. Familiar names such as Linnaeus and Mendel are examples of this group. These two "streams of knowledge" are represented by two concrete bands that begin at either entrance to the courtyard and flow in convoluted but continuous lines into the two doors of Merrill Hall where, symbolically, the knowledge they represent is combined together. The form and texturing of the two concrete "streams" was designed to suggest patterns typical of flowing water. Thus, the bands are deflected by building walls and rock masses, widen on bends as streams typically do, and flow in gentle meanders through the open center of the space. Where the "streams" flow around obstacles and over the smooth pebbles set into their surfaces, the concrete is textured to represent riffles and eddies. Where they meander, water surfaces would typically be smoother and, thus, a correspondingly lighter texturing is used in the concrete. The colors of the pebbles and marbles in the streams are coordinated with the colors of adjacent plant foliage to provide a link between these two elements of the design. The concrete is also tinted to match the colors of the building walls for the same reason. The expansion joints in the exposed aggregate concrete surfaces were curved so that they always meet the building walls and the stream bands at right angles, yet another example of linking the different elements of the design into a unified whole. Finally, the "sources" of the two streams are represented by circles which, when the gates are added in the near future, will act as welcoming pads to be stepped across on entering the Courtyard.

The same abstraction of patterns found in the natural environment occurs in the way rocks are used in the design. Functionally, the rocks are used to separate the circulation routes and the meeting area outside the Conference Hall from the central sitting area. The masses are tallest at the entrances to the Courtyard; thus, ensuring some visual enclosure of the central area. Aesthetically, the rocks provide an effective transition between the hard-surfaces, man-made parts of the courtyard, which are used primarily for circulation, and the softer, more natural areas, which are intended primarily for sitting. In plain view, the rocks are arranged in curves which face into the center and form a bowl-shaped space. The rock masses are set at a height which controls circulation around the perimeter and allows soil to be mounded up against their inner faces, further increasing the bowl-like enclosure.

During the selection of the rocks and their placement on site, an attempt was made to think of the entire ground plans of the Courtyard (consisting of rocks, concrete surfaces and walls, soil, gravel, and plant masses) as a single surface which was sculpted to rise and fall in smooth, flowing lines. Thus, where concrete surfaces meet rock masses, the same aggregate that is used in the concrete is also used as a mulch in the soil pockets amongst the rocks, and these surfaces are sloped to form a transition between the flat concrete and the rocks. On the inner faces of the rocks, the soil was mounded and carefully raked until the soil surface appeared to flow smoothly down from the rock masses to the seat wall without any sharp breaks. Finally, to securely tie this sculptural surface to the surrounding building masses, the columns of Isaacson Hall rest on the rocks as though the building was growing out of the landscape.

As the plants in the Courtyard mature, the intended interaction between them and the rock formations will become more apparent. The design accentuates the difference between the growing, changing qualities which are essential characteristics of plants and the solid, static character of the rocks. This is done in several ways. For example, the groups of *Osmanthus delavayi* will be pruned to form tight, rounded masses. In the northeast corner of the Courtyard, these may be imagined as luxuriant green foothills above which will rise angular, rocky mountain peaks in a manner reminiscent of old Chinese paintings. Along the south and east sides, the rounded *Osmanthus* masses will complement the more rounded rock surfaces and rise above them to give a greater sense of enclosure to the sitting space. In these areas, the loose filagree of the tree canopy (*Acer japonicum* 'Aconitifolium') will contrast dramatically with the *Osmanthus* and rock forms, giving the maple grove the feeling of a miniature forest.

To ensure the separation of the seating area and the circulation areas, the steps down into the former are oriented away from the main Courtyard entrance, thus successfully discouraging circulation through it. The steps pass between the low points in the adjacent rock masses, where groups of *Arctostaphylos canescens* are planted. The natural, open character of these plants will be accentuated by pruning to create open masses through which the seating area will be entered. The loose, wiry character of the plants will be shown to its best advantage against the solid rock masses, and the colors of the twigs and leaves are picked up in the color of the foliage and flowers of some of the surrounding grasses.

To this play between the contrasting characters of the trees, shrubs, and the rocks is added yet another characteristic typical of plants, that of movement. Movement, and sound associated with movement, is an essential quality of bamboo and grasses, of which three and six varieties, respectively, are used in the design. To these are added three more herbaceous plants with grass-like leaves and a number of bulbs with the same linear foliage. Despite the small number of different plants, the design is far from monotonous due to variety in their colors, textures, sizes, and forms. To ensure that the grasses have a strong identity in the design, they are used in large masses, which only intermix around their edges and contrast boldly with each other in the color of their foliage. Through the use of a small plant palette and a restricted range of plant characteristics, the McVay Courtyard demonstrates that we may use plants to create a wide range of environments with dramatically different characters in the northwest. It, thus, encourages others to explore the almost limitless possibilities and potentials of plants.

The grasses are also used to tell another story, that of the microclimate of the Courtyard. In the more exposed bed in the northern part of the space, plants with forms and colors typical of hotter, drier environments are used -- such as tighter grass clumps and glaucous or lighter colored foliage. In the cooler, moister part of the Courtyard, which is shaded by the building and the maple canopy, there is a greater preponderance of taller, looser forms and lush, green foliage.

The bamboos are used to provide a connecting link between the plant and the building masses. The two taller species (*Phyllostachys nigra* and *Sinarundinaria murielae*) are located along the edges of the space, where they soften the building masses. The third bamboo, used in the plant beds (*Shibataea kumasaca*), is intermediate in height between the other two bamboos and the grasses, and acts as a transition between them.

Finally, the bulbs are used as dramatic counterpoints to the grass foliage, springing up unexpectedly in different parts of the courtyard at different seasons, reminding us to keep looking for growth and change in the environment.

These are some of the functional, aesthetic and symbolic considerations that were incorporated into the design of the McVay Courtyard. Two things must be noted in conclusion. First, throughout the design there is a conscious attempt to integrate man-made and natural features and, thus, symbolically resolve conflicts between man and the natural environment. This is representative of the mission of the Center, which attempts to use horticultural knowledge to resolve the activities of urban man and the process of nature, thereby creating environments that are more healthy and enjoyable. The second point to be noted is that the design is intentionally experimental, in terms of the plants selected and in the ways they are composed together. Although a great deal of thought and discussion went into the selection of the plants, it is never possible to predict exactly how any one plant will perform in a particular situation. While one may exceed its expected size (and some have done that already!), others may languish and die or simply not attain an attractive appearance year-round in our climate. The mission of the Center includes observation of these responses through display and demonstration areas and through research activities. Over the years, new species will be added and old ones removed for the McVay Courtyard, like all designs using plants, is not a static final and completed design, but a process, a conversation between the world of man and the world of plants.

Plant Research at the Washington Arboretum*

DR. JOHN H. HANLEY



HERE are approximately eighty-five arboreta located within the boundaries of the United States today. In a very real way they all may be regarded as being in competition, one with another, for a place in the sun. Some of them, such as Arnold Arboretum, have a marked advantage in financial standing, an adequate scientific staff, and age-old tradition. Others have an advantage, more apparent than real to be sure, in vast acreage. At Cornell University, for example, plans are now developing for the creation of an arboretum covering a thousand acres and more. The Morton Arboretum outside Chicago has an area of 735 acres. Still others have what might be termed "advantage of position" wherein, by virtue of an especially amenable geographical location, they have the good fortune of being so placed that it is possible to make use of a wider range of plant types than can be grown in other sections. In this last category the University of Washington Arboretum should be placed. Our arboretum very definitely has the advantage of geographical position which, when combined with such features as an interesting, beautiful topography, a wide variety of habitats, and a conveniently large area, presents an optimistic perspective as one contemplates its future development.

We would be remiss, however, if we were to rely entirely on nature's favors for our future reputation. Our prestige, so far as other similar institutions are concerned, will be determined in a very large measure by the character of our published research work. It behooves us, then, to undertake the scientific solution of as many of the problems of ornamental horticulture as the size and caliber of our permanent staff will permit. In keeping with this idea, and mindful of our primary function as an embryonic arboretum, which is to create attractive plantings of as many trees and shrubs as our climate will permit, we have already undertaken a rational research program along specific lines.

Within the past decade much attention has been directed toward the field of phytohormones, the plant hormones. F. C. Went, at the University of Utrecht, Holland, demonstrated in 1928 that plants apparently produce growth-regulating substances very similar, in

their action at least, to the hormones produced by ductless glands in the animal body. Subsequent research has demonstrated that certain synthetic chemical compounds, when applied to the appropriate plant parts, can release and thereby activate the natural hormones. From a practical standpoint this discovery has focussed much attention on the field of plant propagation, with particular reference to accelerating the formation of roots on cuttings and to speeding up the germination of seeds. As in so many similar instances, this single discovery has created an intensive interest in allied fields. For example, the published reports that have been accumulating for several years on the subject of plant hormones have demonstrated that, although we thought we knew a great deal about the factors that determine failure or success in vegetative propagation, we actually have just begun to understand their magnitude. Without discounting the natural versatility which plants in general have apparently built up through combatting nature's vicissitudes for countless ages, it is being much more generously admitted today that, so far as vegetative propagation is concerned, the limiting factors of the environment are much more narrowly defined than we had supposed. The result is apparent in the careful scrutiny which is being levelled at these environmental factors and their effects upon plant families, genera, species, and even varieties of a species. With this in mind the arboretum will undertake a study of the effects of air temperature, soil temperature, atmospheric humidity, light, hormones, and the like, on the rooting of cuttings.

Another research activity upon which we shall dwell at length lies in the field of plant breeding. Ornamental horticulturists, for various reasons, have been lax in making use of genetic principles in the development of new plant types and in the improvement of the more familiar forms. Following the examples set by the breeders of agricultural crops, it behooves us to make an intensive survey of the genetic possibilities within particular plant groups such as rhododendrons, azaleas, lilacs, and flowering cherries. There is ample room for a great deal of constructive work in this field and we will do our utmost to take advantage of the opportunities.

* 1939. Reprinted from *Little Gardens*, Vol. XI, No. 2, Summer 1939; published by Lake Washington Garden Club; Edith Hardin English, Editor. Dr. John Hanley was the first director of the University of Washington Arboretum

The Center for Urban Horticulture

NEWS

Sallie D. Allen
Seattle, Washington

VOLUNTEER APPRECIATION DINNER September 30, 1986



The third annual Volunteer Appreciation Dinner for all of those who contributed 10 or more hours to Center for Urban Horticulture Programs (i.e., of University of Washington affiliation: CUH or Washington Park Arboretum). The volunteer year extended from October 1, 1985 to September 1, 1986. The attendance was an enthusiastic crowd of 76 kindred spirits who, for the past 12 months, had worked together in a common bond, all with the goal to get a job done and to do it well. They included 47 volunteers who were being so honored and 29 CUH faculty, staff, and graduate students who were honoring THEM.

The evening began with a gala social hour, complete with original recipe punch and Spanish condiments to follow the theme of the dinner. The menu featured Pueblo chicken and rice, fresh fruit, and creme-de-menthe pie, all planned, prepared, and served by CUH personnel.... They have hidden talents we never dreamed of!

The good humor and warm appreciative atmosphere prevailed throughout the evening and the after-dinner program was no exception. The job of Master-of-Ceremonies was capably handled by Dr. John A. Wott...John to us all...in dapper costume. (He made the creme-de-menthe pie... gourmet cook, we learned.) Personnel from CUH was introduced. Volunteer specialty areas were described: Elisabeth C. Miller Library by Valerie (Val) Easton, Librarian; Otis Douglas Hyde Herbarium by Dr. Clement (Clem) W. Hamilton, Herbarium Curator; Washington Park Arboretum, including the Visitors Center, reception area, and gift shop, Arboretum Guide Training, etc., by Van Bobbitt, Eric Nelson, and Dan DeWald.

Van Bobbitt and Becky Johnson presented certificates to all volunteers who had contributed 10 or more hours and a Volunteer Honor Roll (those with 100 or more hours each) was called. Total Volunteer hours for 1985 - 5,725, 1986 - 7,318 !!!

VOLUNTEER HONOR ROLL

Special thanks went to the following volunteers who contributed over 100 hours:

| | | | | | |
|------------------|------------|--------------------|------|---------------------|-----|
| Alderson, Angela | 160½ hours | Harris, Barbara | 101 | MacArthur, Dorothy | 195 |
| Allen, Sallie | 317½ | Horn, Ward | 265½ | MacDonald, Eileen | 128 |
| Bunch, Maxine | 149½ | Jordan, May | 136 | McKenna, Maggie | 177 |
| Burnett, Adele | 116 | Killingsworth, Pat | 156½ | Miller, Margaret | |
| Church of Latter | | Kremer, Nancie | 148½ | and Joe | 108 |
| Day Saints | 312½ | Lackman, Jeanne | 129 | Morell, Virginia | 140 |
| Clarke, Lee | 105 | Leo, Lavonia | 156 | *Mulligan, Brian O. | 385 |
| Dorland, Betty | 145½ | | | Wheatley, Bernice | 187 |

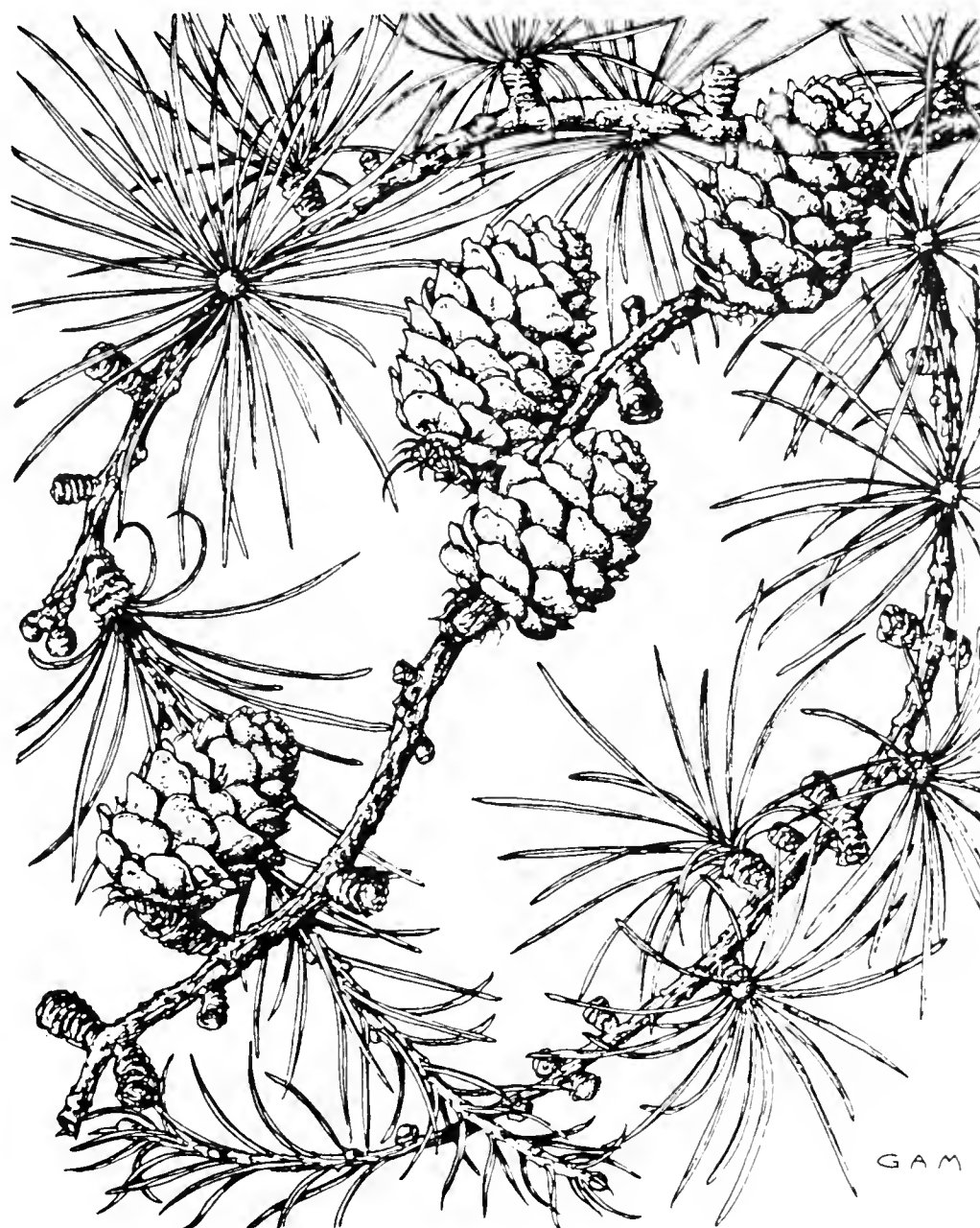
It was a memorable evening, concluded, and rightly so, by Director, Dr. Harold B. Tukey, Jr. who introduced three new members of the faculty and staff who have jointed with the other highly talented personnel: Timothy C. Hohn (Tim), Curator of Plant Collections at the Arboretum; Dr. Deane Wang (pronounced Wong), Ecologist from the Yale School of Forestry and Environmental Studies, explained what his new duties with CUH would be...fascinating; and Dan DeWald, new Program Assistant at the Visitors Center at the Washington Park Arboretum, explained his job aspirations...challenging! We all have every right to be proud of one another as so much has been accomplished in one short year, by everyone involved. Good night.

* * *

Thank you Eric Nelson, Temporary Program Assistant, who assumed the managerial functions at the Washington Park Arboretum Visitors Center for a period of six months. With great patience and ingenuity, he opened the new facilities; he was responsible for all room scheduling, the volunteer programs (both reception and guiding) and all public educational programming. He developed systems that will long be utilized to advantage at the Arboretum. He was a pleasure to work with, will be greatly missed, and we all extend our warmest good wishes to him.

* * *

* Director Emeritus, Washington Park Arboretum, University of Washington



*Christmas Greetings
and
Good Wishes for the New Year*

PROGRESS IN THE ELISABETH C. MILLER HORTICULTURE LIBRARY

Valerie Easton, Horticultural Librarian

The Elisabeth C. Miller Library is now over a year old and well on its way to becoming the finest horticultural collection in the Pacific Northwest. One of the most special things about this truly special library is that it has been built and supported by the generosity and enthusiasm of plant-lovers. The Library was established in 1985 with a gift from Pendleton Miller that provided funds for library construction and furnishings, an endowment for a professional librarian position, and library development. A later gift gave monies for book acquisitions. These gifts served as the cornerstone in the development of the Center for Urban Horticulture, and provided the Library that serves as a major component of the Center's research, educational, and public outreach programs.

Even though the Elisabeth C. Miller Library is quite new, its collection has a lengthy and varied history. The Library brings together, for the first time, books and materials given to and purchased by the Washington Park Arboretum over many years and housed in different locations. The original Arboretum collection began with a few reference books purchased for staff use. When Brian Mulligan became the Arboretum Director in 1947, he began to enlarge the collection, buying in subject areas that supported the work of the Arboretum. Many of the strengths of his early purchasing are still reflected in today's collection, as in the areas of rhododendrons, camellias, roses, woody plants, generally, and the floras of many nations. The Arboretum collection continued to grow, mainly through gifts of money and books from both individuals and organizations. Mr. Joseph Witt, longtime Curator of Plant Collections at the Arboretum, estimated that about 70 percent of the collection came from donations. This fine tradition of support from the community is what the Miller Library relies on today for collection development.

In 1968, there was a suspected arson fire in an Arboretum building. The staff, worried about the safety and security of the many valuable and irreplaceable books they now owned, sent the majority of the Arboretum collection to Special Collections in Suzzallo Library. Most of the books were stored on open shelves in the subbasement of the Library, and a dozen or so of the most valuable volumes in the Rare Book area. They were stored there for 17 years. One of our first tasks as Librarians was to pack, move, and inventory these books. They form the core of our present collection.

Today, the growing collection reflects not only the history of the Arboretum and the interests of its donors, but also the information requirements of the horticultural community the Library serves. The varied needs of the faculty and staff of the Center for Urban Horticulture, horticultural students, the University of Washington, professional horticulturists, and the gardening public, are all considered as additions are made to the collection. Since the summer of 1985, when the library was filled with boxes of unsorted journals, pamphlets, and books, great progress has been made toward development of a coherent, working collection of horticultural materials. Shelves are nearly filled with over 3,500 books and journals in

the fields of horticulture and related sciences, such as botany, plant physiology, soils, forestry, ecology, and climatology. The general collection is relatively strong in the areas of flora of the world, rhododendrons, roses, wildflowers, as well as landscape design, pest control, and the history and practice of gardening. The reference collection includes general reference works (dictionaries, atlases, etc.); horticultural directories, dictionaries, and encyclopedias; works on the flora of the Pacific Northwest; and more specialized works in such areas as pest management, houseplants, woody plants, and horticultural taxonomy. Some of the most useful reference works include Bean's Trees and Shrubs Hardy in the British Isles, 8th edition, Krussman's Manual of Cultivated Broad-Leaved Trees and Shrubs, Volumes I and II, The Royal Horticultural Society's Dictionary of Gardening, Volumes 1 - 4 and Supplement, and the five volume set of Vascular Plants of the Pacific Northwest by Hitchcock, Cronquist, Ownbey, and Thompson.

Specialized materials include nearly 100 newsletters from local and national horticultural organizations, botanical gardens and arboreta nationwide. We have over 100 current journal subscriptions, such as the Annual Review of Plant Physiology, the Journal of the American Society for Horticultural Science, and the American Journal of Botany. Also collected are older journals, seed and gardening catalogs, brochures on gardens and arboreta worldwide, a complete set of Washington State University Extension Service publications, and a subject file of clippings, reprints, and pamphlets on horticultural topics.

The Library owns approximately 500 old and rare books, including valuable works from the 17th, 18th, and 19th centuries, many out-of-print works with hand-colored illustrations, and a nearly complete set of Curtis's Botanical Magazine. An appointment can be made with the Librarians to use this special collection. Some of the most valuable and fragile books can be viewed in the Library's new custom-design display case, a much-appreciated gift of Mrs. J. Pancoast Reath, given in honor of Pendleton and Betty Miller and NOHS.

The Collection is in the process of being cataloged with the Library of Congress classification system, which is the scheme most often used in academic, technical, and botanical libraries. When the cataloging is complete, Library users will be able to locate a book by author, title, or subject on a computer terminal, or in an easily updated computer printed catalog. A second copy of this "book" catalog will be located in the Arboretum Visitor's Center, to give staff and visitors access to the Library's collection.

We are especially pleased that this fine and growing horticultural collection is becoming well known and used by the interested public. The level of activity in the Library has risen dramatically in the past year. In comparison to the 34 titles added to the Arboretum Library in 1970, there were 1,000 new titles (both gifts and purchases) added in 1985; in addition to the hundreds of visitors to the Library during the Center's annual Open House in the fall, there are several group tours and programs every month. Statistics show that, while 110 people (not including Center faculty, students and staff) received reference help by telephone or in person in October of 1985, nearly double that many have asked reference questions and used Library materials in October, 1986. The variety of questions is staggering and always fascinating. Some examples from recent weeks include:

Which hardy plants will do well in a zoo in Jerusalem?

What are the pros and cons of using seaweed as fertilizer?

What is the origin and range of *Nandina domestica*?

Do you have any old illustrations of *Sesamum indicum* or *Sesamum orientale*?

Which varieties of grapes are most successful in the Pacific Northwest?

Is there a map of microclimates in the Seattle area?

Is it safe to plant *Lonicera pileata* in the garden of a daycare center?

Can you suggest a tree that grows quickly, but doesn't get taller than twenty feet and has seasonal color?

Are there standards for displaying a lilac on a truss for judging?

Can I safely transplant a *Paulownia tomentosa*?

What evergreens are recommended for screening out traffic noise?

Is the *Tetrapanax papyriferus* poisonous?

And, of course, how can I get rid of the moles in my garden?

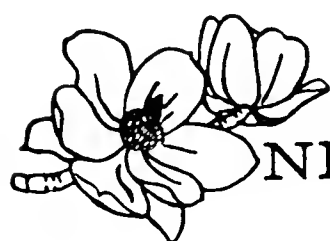
These questions reflect the variety of interests and expertise levels of the Library's users. A user expert in the art of bonsai may need the most elementary level of information on growing Dahlias. A landscape architect who regularly uses the professional journals may be interested personally in how best to propagate wildflowers. A week-end gardener draws inspiration from the beautiful illustrations in the Curtis's Botanical Magazines of the early 19th century. Recently, a noted Tasmanian horticulturist visiting the Center found information in the Miller Library on the plants of Chile that he had been unable to find anywhere else. This is the level of horticultural information and reference service we feel very fortunate to be able to provide.

The Elisabeth C. Miller Library is a member of the International Council on Botanical and Horticultural Libraries, which strives to set standards of excellence for botanical and arboretum libraries; and it offers opportunities for conferences, work shops, and exchanges of books, journals, booklists, and technical assistance. As the Miller Library is a special library supported by private monies and is not a branch library of the University of Washington, it is administered in a different way from other campus libraries. The Library is staffed by two professional librarians (who job-share one full-time position), a part-time work study student, and an enthusiastic and dedicated group of volunteers. A Library Advisory Committee, appointed by Dr. Tukey, advises the Administration of the Center and the Librarians on policy-making decisions. The Committee includes Dr. Margaret Chisholm, Director of the University of Washington School of Library and Information Science, and current President of the American Library Association, the largest professional organization for librarians in the world. Other members of the Advisory Committee include Dr. H. B. Tukey, Jr., Mrs. Karole Keifer, past

president of the Arboretum Foundation Unit Council, Mrs. Otis Hyde, longtime NOHS member for whom the Herbarium is named, Ms. Nancy Blase, Natural Sciences Librarian at the University of Washington, Dr. Clement Hamilton, Professor of Horticultural Taxonomy at the Center, and Lyn Sauter, the Arboretum's first librarian and an early consultant for the Miller Library. This group, consisting of experts in the library field and representative of Miller Library users, meets regularly to give advice on current Library concerns, policies, and longer-range planning. With their help and continued strong community support, the Elisabeth C. Miller Library is growing into a major resource for the horticultural community of the Pacific Northwest, and is taking its place among horticultural libraries nationwide.

The Elisabeth C. Miller Library, hours: 9-12 and 1-5, Monday through Friday
 Librarians: Laura Lipton, Valerie Easton 543-8616

* * *



NEW ON THE SHELF

OF THE ELIZABETH C. MILLER LIBRARY

Valerie Easton, CUH Librarian

The Adventurous Gardener, by Christopher Lloyd. Random, 1984.

Classic Garden Plants, by Will Ingwerson. Collingridge Books, 1984.

Conifers, by D. M. van Gelderen. Timber Press, 1986.

The Encyclopedia of Herbs and Herbalism, Malcolm Stuart, ed. Crescent Books, 1986.

Growing Lilies, by Derek Fox. Croom Helm, 1985.

Hummingbirds; Their Life and Behavior, by Esther Tyrrell. Crown, 1984.

A Japanese Touch for Your Garden, by K. Seike, M. Kudo, and Engel. Kodansha, 1986.

Landscaping with Perennials, by Emily Brown. Timber Press, 1986.

The Pollination of Flowers, by Proctor and Yeo. Taplinger, 1972.

The Water Garden, by Anthony Paul. Viking, 1986.

The Wildlife Gardener, by John V. Dennis. Knopf, 1985.

Special thanks to those who have recently contributed books to our library, including: John Wott, Brian Mulligan, Van Bobbitt, Ward Horn, Deane Wang, Constance McCord, Gary Oman, the Seattle Rose Society, Mr. and Mrs. Pendleton Miller, Mr. and Mrs. Ellis Frederick, and Sallie Allen.

Book Reviews: RHODODENDRON HYBRIDS: A GUIDE TO THEIR ORIGINS, By Homer E. Salley and Harold Greer. Timber Press, Portland, 1986. \$55.00.

Let's start this review by quoting from the book jacket:

"The rhododendron grower and hybridizer, both amateur and professional, will find here the 'pedigrees' of over 4,000 named hybrids and selected forms of species."

"The book is arranged alphabetically by cultivar name. Following each name, the parentage back through one or more generations is traced to the original species. The genetic fraction of each parent is recorded where known or calculable. These contributions are the inherited determinants of flower color, resistance to heat and cold, disease and insects, plant size and habit, shape and texture of foliage and its persistence. There follow descriptions of the plant and its flower, including information on size, habit, hardiness, and awards. Each entry concludes with the name of the hybridizer and the date of the cross. The initial basis for this work is the pedigree books maintained over many years by Greer Gardens under the direction of Harold E. Greer and his father - many growers have turned to these three journal books as some of the most important single sources of information on the subject."

"Six hundred full-color illustrations show hybrids which have not heretofore been included in the Year Book of the Royal Horticultural Society, or the Journal of the American Rhododendron Society."

The book is all that and more. There are several appendices: a list of rhododendron species, including both the new and former names; a five-page listing of hybridizers, raisers, and registrants; a list of Rhododendron hybrids of uncertain parentage which, for some unknown reason, are not included in the main listing (resulting in much "back and forth") a useful color name and number list; a selected bibliography; and last, and very puzzling, a 14-page listing of the hybrids of Weldon Delp. Although the recipient of the American Rhododendron Society Gold Medal for his hybridizing work, it seems inappropriate to give Mr. Delp a separate listing when the most noted hybridizers, such as Halfdan Lem, get one line. Perhaps this separate listing should be eliminated from the next edition, incorporating Mr. Delp's hybrids into the main text.

Another change I would like to see in the next edition would be an improvement in the readability. Printing the clone name in dark type or setting it off in some way would make it easier to read. There is a wealth of information here, both for hybridizers and nurserymen, and it is a shame not to make it more readable. The problem could be solved by using a more sophisticated computer, but that would cost more money; the current edition is \$55.00.

A great plus for readers is the 600 alphabetically arranged color pictures of the various hybrids. Most photos are by Harold Greer, a very accomplished photographer. (Speaking of Greers, I would like to see Harold's father referred to by name in the next edition. He was the originator of the idea, and deserves to be referred to as Edgar Greer. I had to look in the list of hybridizers to find his given name.)

Would I recommend that the general reader buy the book? Certainly, if he has a serious interest in rhododendrons, or even just a curiosity about the origins of garden hybrids. Buy a copy and find out how Ned Brockenbrough came up with his wonderful Rhododendron 'Nancy Evans'. You, too, can come up a winner!

Pat Bender, Editorial Staff
Horticulture Northwest

MANUAL OF CULTIVATED BROAD-LEAVED TREES AND SHRUBS, Gerd Krussman, Timber Press, Portland, Oregon, Volume I (A-D), 1984, \$65; Volume II (E-PRO), 1985, \$65. Vol. III (PRU-2) 1986, \$65.00. Before January 1, 1987, \$175.50 Vol. I-III, or \$58.50 each.

Originally published in German in four volumes, beginning in 1976, this monumental work is now available to us in English, the third and last volume hot off the press, review copy having just reached me this last week. The author, Dr. Gerd Krussman, was formerly Director of the Dortmund Botanic Gardens and of the German National Rosarium. He served as consultant and adviser to many associations, societies and periodicals, and also is well known as the author of Manual of Cultivated Conifers.

Translating, updating and revising the text was done by Michael E. Epp, formerly associated with Hilliers' Nursery and Arboretum and the Dortman Botanic Gardens. The Technical Editor, Dr. Gilbert S. Daniels, was formerly Director of the Hunt Institute and President of the American Horticultural Society.

It is difficult to do justice to a review of a set of horticultural reference books of 1,500 pages, in which 796 genera, 5,400 species and over 6,000 cultivars are described. From the title, Manual of Cultivated Broad-Leaved Trees and Shrubs, one might think that "cultivated" would limit the scope; however, in actually looking up rare and unusual trees and shrubs seldom seen in cultivation, not only were those listed and described, but profusely illustrated by excellent botanical drawings.

If there is a weakness in a horticultural work written in Europe, it is often in the treatment of the trees and shrubs of American origin, particularly those native to the western section of the country. This was not found to be the case in Krussman, as even some of the rarer American natives are described accurately and expertly. The more genera of particular interest that I look up, the more convinced I am that this set of encyclopedias will become one of the most used and useful parts of my reference library. I am certain that shortly I will wonder how I ever got along without it.

Volume I (448 pages) begins with a well-illustrated guide to terminology used, including leaf shapes, margins, arrangement, forms of crowns, direction of growth, inflorescence, etc. There is even an alphabetical reference to botanical terminology in five languages, explanation of symbols, hardness maps of Europe, North American and China, and a temperature conversion chart. There follows a list of abbreviations to other reference works, one or more of which are found at the end of most plant descriptions. There are excellent botanical drawings, distribution maps, graphs; at least one on almost every page, sometimes two or three, as well as entire sections of black and white photographs, mostly good, although I personally learn much more from the fine detailed drawings.

There is an alphabetical listing of the Genera, *Abelia* to *Duranta*, which includes botanical descriptions, native habitat, symbols to horticultural properties, cultivation, propagation, and of great value is the reference to one or two publications where the subject is more fully treated.

Volume II (625 pages, including plates) repeats some of the important explanations, such as alphabetical reference to botanical terminology, of symbols, and lists of abbreviations, etc., so that it is unnecessary to have to refer back to Volume I to understand the text. The main text includes the alphabetical listing of Genera, *Eccremocarpus* to *Protea*.

Volume III (682 pages, including plates) follows the precise format of the two preceding works, with the text *Prunus* through *Ziziphus* inclusively. Although overwhelmed by my unrealistic desire to jump into my own personal *Ericaceae* and small shrub research (all this and the Holidays too!), it was necessary to settle on a few dozen favorite rarities. *Tripetaleia paniculata* is a monotypic genus? What about the miniature *T. bracteata* in the upper garden? See *Botryostege bracteata*...(after Christmas). Another favorite genera, *Salix*, 25 pages of text, including 16 quarter, half, or full pages of line drawings (Figure 199, full page, flowers enlarged...26) and eight pages of plates with two to four black and white photographs per plate.

Notable additions to Volume III are as follows: Appendix, Errata in Volume I, Taxonomic Outline of the Families and Genera, Index to the Botanical Authors and Horticulturists. The one further addition was back at the beginning of Volume III, Acknowledgments by the author. Gerd Krussmann wrote, "I must extend my thanks to my many colleagues and friends throughout the world who've readily offered assistance at my request." and there follows a Who's Who of international botanists, horticulturists, and honored Arboreta. He continues, "Many thanks go especially to my dear friend Dr. Donald Wyman, as well as Brian O. Mulligan in Seattle...."

The Manual of Cultivated Broad-Leaved Trees and Shrubs is a beautifully produced, quality publication, 8-1/2" x 11" in size, hardbound. I can enthusiastically recommend this outstanding set of reference books to every serious gardener, botanist, and horticulturist, amateur or professional. Thank you Timber Press for contributing this first-class publication to the shelves of our private and public libraries.

Sallie D. Allen, Editor
Horticulture Northwest

* * *



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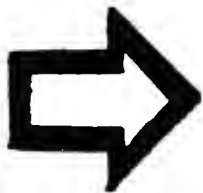
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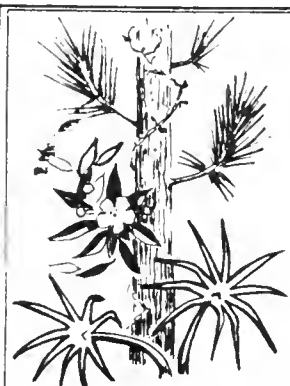
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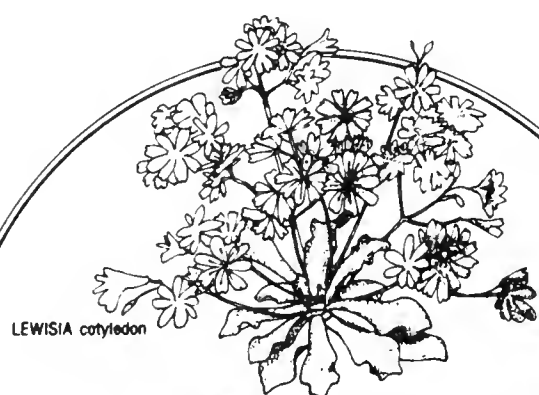
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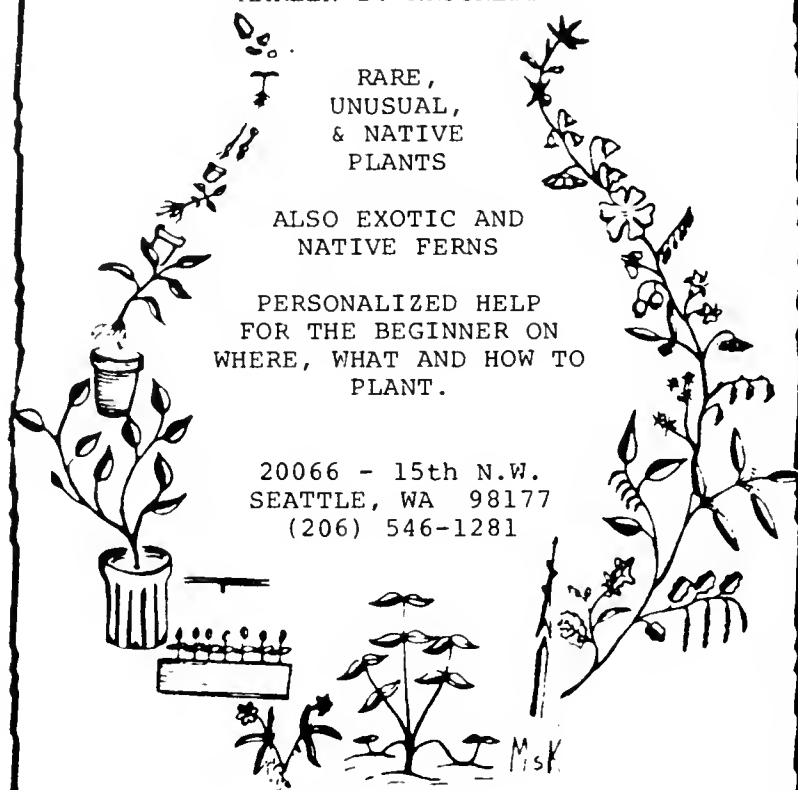
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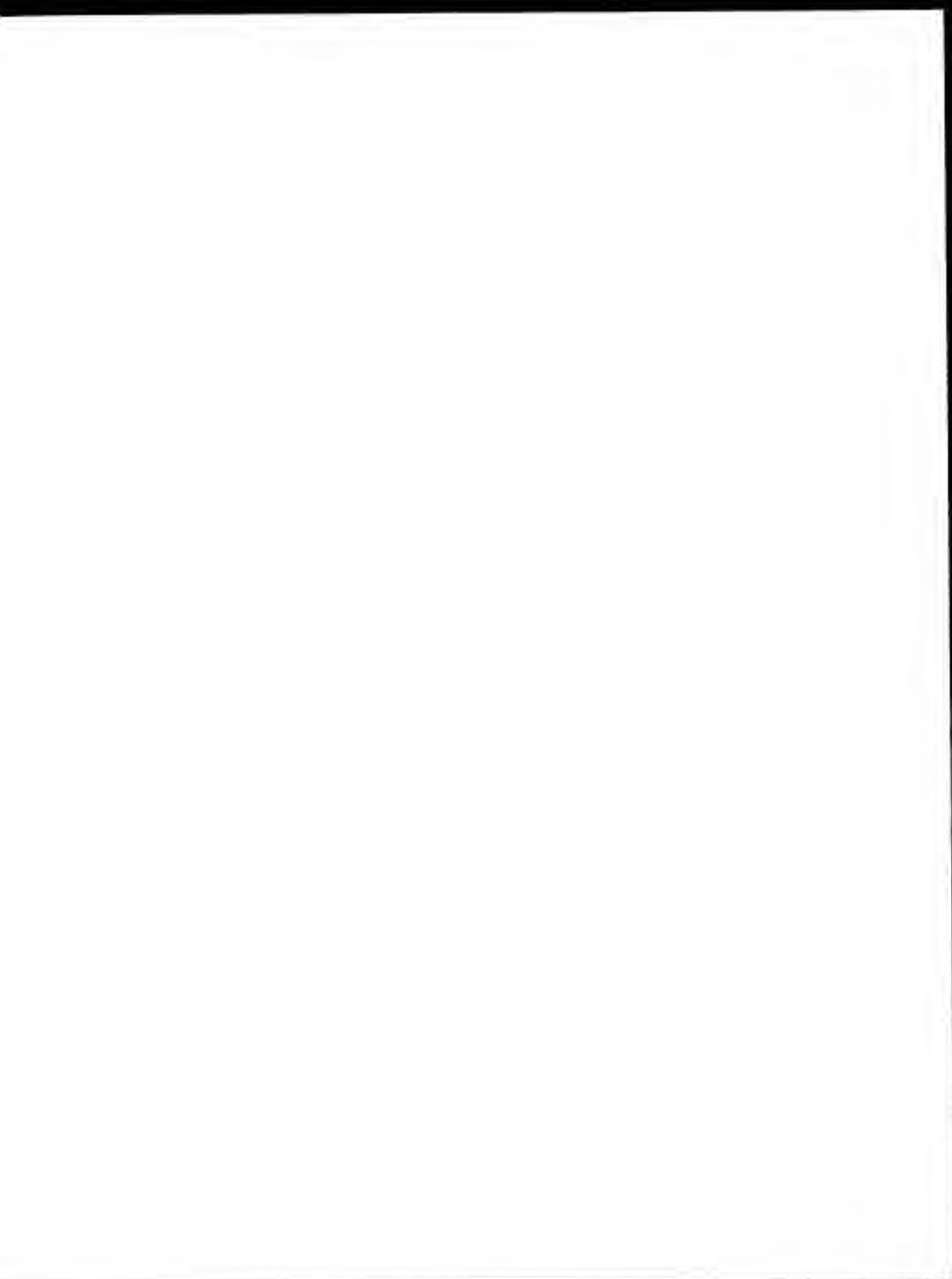
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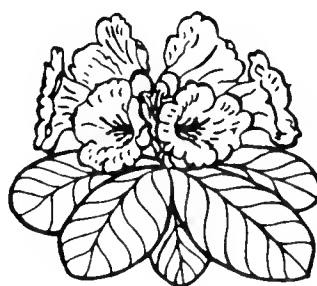
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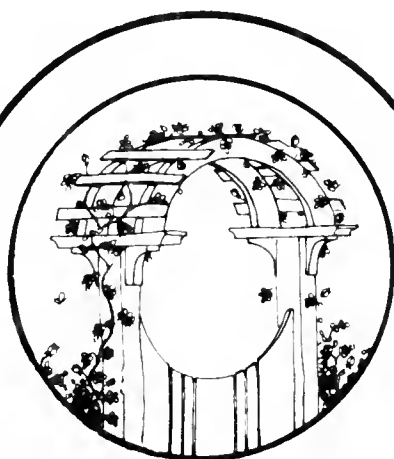
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